

**APPENDIX J**  
**95% UCL-SPECIFIC HAZARD QUOTIENTS**

**Table J-1. Reassessment of Hazard Quotients Using the 95% UCL Concentrations in Surface Soil**

Species	COPEC	95% UCL C <sub>soil</sub> (mg/kg)	BW (kg)	I <sub>r</sub> <sub>soil</sub> (kg/day)	C <sub>plant</sub> (mg/kg)	C <sub>worm</sub> (mg/kg)	C <sub>mammal</sub> (mg/kg)	P <sub>plant</sub> (%)	P <sub>worm</sub> (%)	P <sub>mammal</sub> (%)	IR (kg/day)	SUF	Dose (mg/kg-day)	TRV <sub>low</sub> <sup>(c)</sup>	TRV <sub>high</sub> <sup>(c)</sup>	HQ <sub>low</sub>	HQ <sub>high</sub>
Vole	Cadmium	0.44	0.026	0.0003	0.395	4.3	0.192	1	0	0	0.012	1	0.187	0.06	2.64	3.1	0.07
	Chromium	72.49	0.026	0.0003	2.97	22.2	5.38	1	0	0	0.012	1	2.207	3.28	13.14	0.7	0.17
	Copper	25.88	0.026	0.0003	7.03	13.3	12.3	1	0	0	0.012	1	3.543	2.67	632	1.3	0.01
	Lead	66.74	0.026	0.0003	2.8	23.9	6.9	1	0	0	0.012	1	2.062	1	240.64	2.1	0.01
	Mercury	0.14	0.026	0.0003	0.093	0.24	0.008	1	0	0	0.012	1	0.045	0.027	0.27	1.7	0.17
	Selenium	0.44	0.026	0.0003	0.207	0.51	0.486	1	0	0	0.012	1	0.101	0.05	1.21	2.0	0.08
	Zinc	73.80	0.026	0.0003	52.4	350.7	106.4	1	0	0	0.012	1	25.036	9.6	411	2.6	0.06
	2,6-DNT	0.19	0.026	0.0003	0.44	0.19	0	1	0	0	0.012	1	0.205	0.2	1.5	1.0	0.14
	HMX	0.69	0.026	0.0003	4.67	0.69	0	1	0	0	0.012	1	2.163	1	5	2.2	0.43
Robin <sup>(a)</sup> (50% Worms + 50% Plants)	Cadmium	0.44	0.083	0.0004	0.395	4.3	0.192	0.5	0.5	0	0.004	1	0.115	0.08	10.4	1.4	0.01
	Chromium	72.49	0.083	0.0004	2.97	22.2	5.38	0.5	0.5	0	0.004	1	0.956	1	5	1.0	0.19
	Lead (Eco-SSL)	66.74	0.083	0.0004	2.8	23.9	6.9	0.5	0.5	0	0.004	1	0.965	1.6	8.75	0.6	0.11
	Lead (BTAG)	66.74	0.083	0.0004	2.8	23.9	6.9	0.5	0.5	0	0.004	1	0.965	0.014	8.75	68.9	0.11
	Total DDT	0.12	0.083	0.0004	0.02	1.38	0.72	0.5	0.5	0	0.004	1	0.034	0.009	1.5	3.8	0.02
	Cadmium	0.44	0.083	0.0004	0.395	4.3	0.192	0	1	0	0.004	1	0.209	0.08	10.4	2.6	0.02
Robin <sup>(b)</sup> (100% Worms)	Chromium	72.49	0.083	0.0004	2.97	22.2	5.38	0	1	0	0.004	1	1.419	1	5	1.4	0.28
	Lead (Eco-SSL)	66.74	0.083	0.0004	2.8	23.9	6.9	0	1	0	0.004	1	1.473	1.6	8.75	0.9	0.17
	Lead (BTAG)	66.74	0.083	0.0004	2.8	23.9	6.9	0	1	0	0.004	1	1.473	0.014	8.75	105.2	0.17
	Mercury	0.14	0.083	0.0004	0.093	0.24	0.008	0	1	0	0.004	1	0.012	0.039	0.18	0.3	0.07
	Zinc	73.80	0.083	0.0004	52.4	350.7	106.4	0	1	0	0.004	1	17.257	17.2	172	1.0	0.10
	Total DDT	0.12	0.083	0.0004	0.02	1.38	0.72	0	1	0	0.004	1	0.067	0.009	1.5	7.5	0.04
	Cadmium	0.44	5.7	0.03	0.395	4.3	0.192	0.5	0.5	0	0.3	1	0.126	0.06	2.64	2.1	0.05
Raccoon	Lead	66.74	5.7	0.03	2.8	23.9	6.9	0.5	0.5	0	0.3	1	1.054	1	240.64	1.1	0.004
	Mercury	0.14	5.7	0.03	0.093	0.24	0.008	0.5	0.5	0	0.3	1	0.010	0.027	0.27	0.4	0.04
	Zinc	73.80	5.7	0.03	52.4	350.7	106.4	0.5	0.5	0	0.3	1	10.996	9.6	411	1.1	0.03

**Table J-1. Reassessment of Hazard Quotients Using the 95% UCL Concentrations in Surface Soil (Continued)**

<b>Owl</b>	Cadmium	0.44	0.16	0.0004	0.395	4.3	0.192	0.5	0.2	0.3	0.02	1	0.140	0.08	10.4	1.8	0.01
	Chromium	72.49	0.16	0.0004	2.97	22.2	5.38	0.5	0.2	0.3	0.02	1	1.124	1	5	1.1	0.22
	Lead (Eco-SSL)	66.74	0.16	0.0004	2.8	23.9	6.9	0.5	0.2	0.3	0.02	1	1.198	1.6	8.75	0.7	0.14
	Lead (BTAG)	66.74	0.16	0.0004	2.8	23.9	6.9	0.5	0.2	0.3	0.02	1	1.198	0.014	8.75	85.6	0.14
	Mercury	0.14	0.16	0.0004	0.093	0.24	0.008	0.5	0.2	0.3	0.02	1	0.012	0.039	0.18	0.3	0.07
	Zinc	73.80	0.16	0.0004	52.4	350.7	106.4	0.5	0.2	0.3	0.02	1	16.217	17.2	172	0.9	0.09
	Total DDT	0.12	0.16	0.0004	0.02	1.38	0.72	0.5	0.2	0.3	0.02	1	0.063	0.009	1.5	7.0	0.04
<b>Harrier</b>	Lead (Eco-SSL)	66.74	0.35	0.0006	2.8	23.9	6.9	0	0	1	0.03	1	0.706	1.6	8.75	0.4	0.08
	Lead (BTAG)	66.74	0.35	0.0006	2.8	23.9	6.9	0	0	1	0.03	1	0.706	0.014	8.75	50.4	0.08
	Total DDT	0.12	0.35	0.0006	0.02	1.38	0.72	0	0	1	0.03	1	0.062	0.009	1.5	6.9	0.04

Shading indicates HQ>1.0.

Note: For birds, two sets of low TRVs were modeled for lead: the Navy/BTAG TRV exceeded an HQ<sub>low</sub> of 1; the Eco-SSL TRV did not exceed an HQ of 1.

Concentrations of HMX and Total PCBs are the site-wide maximums.

Total DDT is the sum of 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD.

LPAH – low molecular weight polycyclic aromatic hydrocarbons

HPAH – high molecular weight polycyclic aromatic hydrocarbons

(a) Assumes an omnivorous diet for the robin

(b) Assumes only an invertivorous diet for the robin

(c) For mammal receptors: TRVs for cadmium, copper, lead, mercury, selenium, thallium, zinc, and Total DDT were obtained from U.S. EPA Region 9 Navy/BTAG; TRVs for chromium were from Sample et al., 1996; TRVs for 2,6-DNT were from ATSDR, 1998; and TRVs for HMX were from USACHPPM, 2001. For avian receptors: cadmium, copper, lead, mercury, selenium, zinc, and Total DDT were obtained from U.S. EPA Region 9 Navy/BTAG; TRVs for chromium were obtained from Sample et. al., 1996; and the other TRVs for lead were from U.S. EPA, 2005.